Application No.: 09/821,753

Docket No.: 2328-053

Amendments to the Specification:

Please replace the penultimate paragraph of pages 13-14 with the following amended paragraph:

For purposes of explanation, assume that the functions of Figures 2, 3 and 4 represent the power RF source 30 and variable gain amplifier 132 supply to electrode 56. Prior to the beginning of ramping function 170, at time T1, memory system 24 and microprocessor 20 set the gain of amplifier 132 so that electrode 56 supplies constant power P1 to plasma 50. Hence, prior to ramping function 170, the amount of AC power supplied to the plasma that is processing the workpiece is in a steady state condition subsequent to start up of the application of power to the plasma. During a recipe step of interest, memory system 24 and microprocessor 20 control the gain of amplifier 132 to increase the power supplied to electrode 56 as indicated by linear, upwardly directed, gradually increasing and substantially continuous ramping function 170. Ramping function 170 continues until the recipe step has been completed at time T2. Thereafter, memory system 24 and microprocessor 20 maintain the gain of amplifier 132 constant so that electrode 56 supplies constant power P2 to plasma 50. Hence, subsequent to ramping function 170, the amount of AC power supplied to the plasma that is processing the workpiece is in a steady state condition prior to shut down of the power applied to the plasma. Memory system 24 and microprocessor 20 control the gain of amplifier 132 and the power electrode 56 supplies to plasma 50 to gradually and substantially continuously decrease the plasma power along ramping function 172. Ramping function 172 extends from a constant value P2, at time T1, to a constant value P1, at time T2. The power decrease from P2 to P1 is performed in the same manner described for upwardly directed ramping function 170.